

# **[METHOD AND RELATED DEVICE FOR CONTROLLING ILLUMINATION OF A BACKLIGHT OF A LIQUID CRYSTAL DISPLAY ]**

## **Abstract of Disclosure**

A method and device for controlling the illumination of a backlight of an LCD includes a light sensor that generates an ambient light intensity value, a processor that interprets the measured ambient light intensity value, a light source that is controlled by the processor, and an LCD device that is illuminated by the light source. The processor first calculates a light source intensity value based on a user-adjustable desired apparent light source brightness value and the measured ambient light intensity value. The processor then triggers the light source to emit light at a time-averaged intensity, utilizing frequency variation or a varying duty cycle, which corresponds to the calculated light source intensity value, such that the LCD device is illuminated. In this way, the information displayed on the LCD is clearly visible to a user in any ambient lighting condition.

